



**File Code:** 1950

**Date:** September 15, 2017

Dear Stakeholder,

The North River Ranger District of the George Washington and Jefferson National Forests is proposing a landscape scale restoration and management project aimed at improving watershed conditions, restoring habitats for a diversity of terrestrial and aquatic species, increasing resilience in ecological systems, and providing forest products to local economies. The North Shenandoah Mountain Restoration and Management (NSM) Project is designed to implement the goals and objectives described in the 2014 Revised Land and Resource Management Plan (Forest Plan) for the George Washington National Forest (GWNF). An environmental assessment (EA) will be prepared as part of the planning process for this project. Decisions resulting from the analysis will address actions needed to maintain or improve resource conditions in the project area.

Many of you have already participated in meetings and field trips to help identify these opportunities. This letter provides a comprehensive look at the restoration and management activities we have identified to date for your consideration and comment as we move forward with the project. The NSM Project is an integrated resource project with proposals for restoration of pine species, wildlife opening creation, prescribed fire, timber harvest, and road decommissioning. As discussed at the last public meeting on July 26, 2017 we have decided to proceed with the recreation-related aspects of this project in a separate track that will collaboratively incorporate the agency's direction for a sustainable recreation program. We anticipate providing you information in the near future that will continue our discussions on these recreation opportunities within the NSM project area.

Please review the proposed actions for the North Shenandoah Mountain Restoration and Management Project. If you have information that would contribute to a decision regarding this action, please send your comments, in writing, by October 18, 2017. The information you provide will help in the development of alternatives that will address issues identified for this action. A thorough description of the proposal, alternatives, and analysis of the effects of each alternative, will be documented in a draft EA that will also be circulated for your consideration and comment. You can view project information and documents online at <https://www.fs.usda.gov/detail/gwj/home/?cid=FSEPRD495600> and <http://www.fs.usda.gov/project/?project=50342>.

If you do not have access to email or the internet and would like to continue to receive these communications, please contact Karen Overcash, Project Leader (see contact information below).

### **Location of the Project Area**

The project area extends over approximately 150,000 acres of public and private lands within Pendleton County, West Virginia and Rockingham County, Virginia. It is bounded on the east by State Routes 259 and 763, on the north by the Virginia and West Virginia state boundary, on the east by WV State Route 3, and on the south by US Highway 33. About 103,000 acres of the project area are national forest system (NFS) lands on the North River Ranger District. See Appendix A, Map 1.



## General Description of the Area

The NSM Project area encompasses a wide variety of past events that have played a significant role in creating the vegetative conditions existing today. Most of the area, prior to Forest Service acquisition, was extensively harvested for lumber and pulpwood during the latter part of the 19<sup>th</sup> century and the early 1900s. The chestnut blight during the 1920s and 30s removed all the American chestnut from the overstory and created openings that enabled previously overtopped trees, primarily oak species, to dominate the stand.

This has led to the current vegetation composition; primarily forested stands of upland oaks with scattered stands of “yellow pine”. The most common tree species found in the overstory include chestnut oak, white oak, scarlet oak, black oak, yellow poplar, white pine, Virginia pine, and pitch pine. Examples of common species found in the mid-story include black gum, white oak, dogwood, chestnut oak, red maple, scarlet oak, and hickory. Examples of common species found in the understory include: red maple, hickory, white pine, black gum, white oak, chestnut oak, black oak, scarlet oak, yellow poplar, dogwood, pitch pine, mountain laurel, and sassafras. The mixture of vegetation is typical of acidic soils developed over sandstone and shale bedrock in the ridge and valley portion of the Appalachian Mountains.

Parts of the project area have been subjected to recurrent wildfires in the past as evidenced by charred stumps and basal fire scars, including 49 small wildfires within the last 20 years. Approximately 5,100 acres within the project area have been prescribed burned in the past decade (e.g. Heavener Mountain, Dunkle Knob, Hall Spring, Gauley Ridge) which has helped thermally open up dense hardwood-pine stand canopies and reinvigorate understory vegetation growth.

The connectivity of rivers, streams, and wetland habitats has been a critical issue in the protection, restoration, and resilience of aquatic ecosystems and the many organisms that rely on movement/migration throughout the system to fulfill essential stages in their life history, as well as respond to changing environmental conditions. Common barriers to aquatic passage include the obvious dam or natural waterfall, however, the maintenance of road systems and the series of culverts where they intersect with aquatic habitats, present a less obvious and more widespread ecosystem health issue.

The Forest Plan has allocated the NSM Project area to a wide variety of management emphases for the NFS lands within this project area, as shown below in Table 1. Management Area Prescriptions (Rx) are land allocations of areas having common biological, physical, watershed and social conditions, desired conditions, suitable uses, management objectives, and design criteria (standards). These Rx's are mapped in Appendix A, Map 1, and described in detail in Chapter 4 of the Forest Plan.

**Table 1. Management Area Prescription (Rx) Acreage within the NSM Project Area**

| <b>Management Prescription (Rx)</b>                    | <b>Approximate Acres (%)</b> |
|--|------------------------------|
| 1B - Beech Lick Knob Recommended Wilderness Study Area | 5,730 (5%)                   |
| 4B - Little Laurel Run Natural Research Area           | 1,977 (2%)                   |
| 4D - Special Biological Areas                          | 973 (1%)                     |
| 5C - Designated Utility Corridors                      | 926 (1%)                     |
| 7B - Scenic Corridors                                  | 1,711 (2%)                   |
| 7C - Rocky Run All Terrain Vehicle Use Area            | 2,380 (2%)                   |
| 7D - West Side Shooting Range                          | 8 (<1%)                      |
| 7E1 - Slate Lick Dispersed Recreation Area             | 1,667 (2%)                   |
| 7G - Pastoral Landscapes                               | 1,616 (2%)                   |
| 8E7 - Shenandoah Mountain Crest (Cow Knob Salamander)  | 17,205 (17%)                 |
| 11 - Riparian Corridors                                | *                            |
| 12D - Remote Backcountry                               | 3,478 (3%)                   |
| 13 - Mosaics of Habitat                                | 65,251 (63%)                 |
| Total  | 102,922                      |

\* Riparian Corridors acreage is embedded in other Management Area Prescriptions

### **Description of Management Area Prescriptions**

Rx 1B-Beech Lick Knob Recommended Wilderness Study Area. This area is one of two new stand-alone areas in the Forest Plan that are recommended for congressional designation as a national wilderness area. Until legislation, this area is managed to provide for existing uses where compatible with protecting its wilderness characteristics.

Rx 4B-Little Laurel Run Natural Research Area. This area is part of a national network of ecological resources designated for research, education and maintenance of biological diversity on NFS lands.

Rx 4D-Special Biological Areas. These areas serve as core areas for conservation of the most significant and rarer elements of biological diversity identified on the Forest. These areas or communities are assemblages of diverse habitat for threatened and endangered species, sensitive and locally rare species that occupy a small portion of the landscape, but contribute significantly to biological diversity.

Rx 5C-Designated Utility Corridors. This area surrounds the Dominion Energy Power transmission line across the project area.

Rx 7B-Scenic Corridors. This management prescription is found along US Route 33 on the southern end of the project area and is managed for high quality scenery.

Rx 7C-Rocky Run All Terrain Vehicle Use Area. This area is one of three areas on the Forest where ATV use is authorized. The emphasis is to provide routes designated specifically for licensed full size off-highway vehicle, ATV, and/or motorcycle users.

Rx 7D-West Side Shooting Range. This area is a range for rifle and pistol shooting.

Rx 7E1-Slate Lick Dispersed Recreation Area. Dispersed Recreation Areas are areas of non-formal camping and recreational that receive moderate to high recreation use. They are managed to provide a variety of dispersed recreation opportunities; improve the settings for outdoor recreation; and enhance visitor experiences in a manner that protects and restores the health, diversity, and productivity of the land.

Rx 7G-Pastoral Landscapes. These areas are often associated with old farm lands. They are actively managed for a variety of wildlife species that need open canopies and open woodlands. The emphasis is on providing, through maintenance or restoration, high quality, generally open landscapes with a pastoral landscape character within a patchwork of forested areas. While the emphasis is on the open conditions, these areas also contain forested areas, including bottomland hardwoods. These landscapes provide important open grassland conditions for wildlife.

Rx 8E7-Shenandoah Mountain Crest (Cow Knob Salamander). This large area is managed to protect and/or enhance habitat for the Cow Knob salamander and for other outstanding natural biological values. The protection, maintenance and restoration of species, natural communities and ecological processes are the primary objectives.

Rx 11-Riparian Corridors include the riparian habitat along streams, lakes, wetlands and floodplains. These corridors are managed to retain, restore and/or enhance the inherent ecological processes and functions of the associated aquatic, riparian and upland components within the corridor. These areas are not specifically mapped on the prescription area map but are embedded within other management prescriptions.

Rx 12D-Remote Backcountry Areas. Remote Backcountry Areas are managed to provide mature successional forest with developing or well-developed canopies, large woody material on the ground and den and cavity trees. Recreation opportunities are provided in these large remote, core areas where users can obtain a degree of solitude and the environment can be maintained in a near-natural state. There is little evidence of humans or human activities other than recreation use and nonmotorized trails.

Rx 13-Mosaics of Habitat areas are where desired ecosystem and species diversity conditions are managed through the use of timber harvest, prescribed fire, and other management activities. Wildlife habitat management activities provide for both ecological objectives and recreational (hunting and wildlife viewing) objectives; while meeting the demand for timber products through timber harvest, salvage of dead and dying trees, and personal use for firewood.

## **Purpose and Need for Action**

The Forest Service is proposing a series of actions move the landscape in the project area toward desired conditions described in the Forest Plan. The purpose of this project is to increase the resilience and proper function of ecological systems through the promotion of desired structure (successional stages and open canopy conditions), species composition, and fire regimes that will provide habitats to maintain plant and animal species viability and diversity. The Forest Plan identifies that mature and late successional stages

of forests are well represented across the Forest; however, grassland, shrubland, regenerating forest, and open woodland conditions are lacking. The Forest Plan contains objectives to provide these lacking conditions through the use of prescribed fire and various silvicultural practices with timber harvest. This will be accomplished through the implementation of management prescriptions suitable to the project area, as described in the Forest Plan.

Departure from the desired vegetation structure and composition is influencing the ecological sustainability within the project area. The current conditions do not reflect the desired biological, physical, and watershed conditions as described in Forest Plan. If left unaddressed, they will decrease the health, diversity and productivity of the forest.

Resilience is the ability of an ecological system to absorb disturbances while retaining the same basic structure and ways of functioning. Resilient forests are those that not only accommodate gradual changes related to pollutants or changes in climate, but also tend to return toward a prior condition after disturbances such as wildfire, drought, insect, pathogens, invasive species, either naturally or with management assistance. Within the GWNF, maintaining a diversity of tree species in ecological systems, age and size class diversity within those ecological systems, and forest density similar to what historic disturbance regimes produced, are considered the underpinnings of a resilient forest.

## Existing Conditions for Ecological Systems

The Forest Plan identifies nine ecological system groups for the GWNF and prescribes desired conditions for each group that incorporate historical disturbance regimes and habitats needed for a variety of species associated with each ecological system.

The ecological system groups that occur on the NFS lands in the NSM project area are shown in Table 2.

**Table 2. Forested Ecological System Groups on NFS lands in the NSM Project Area**

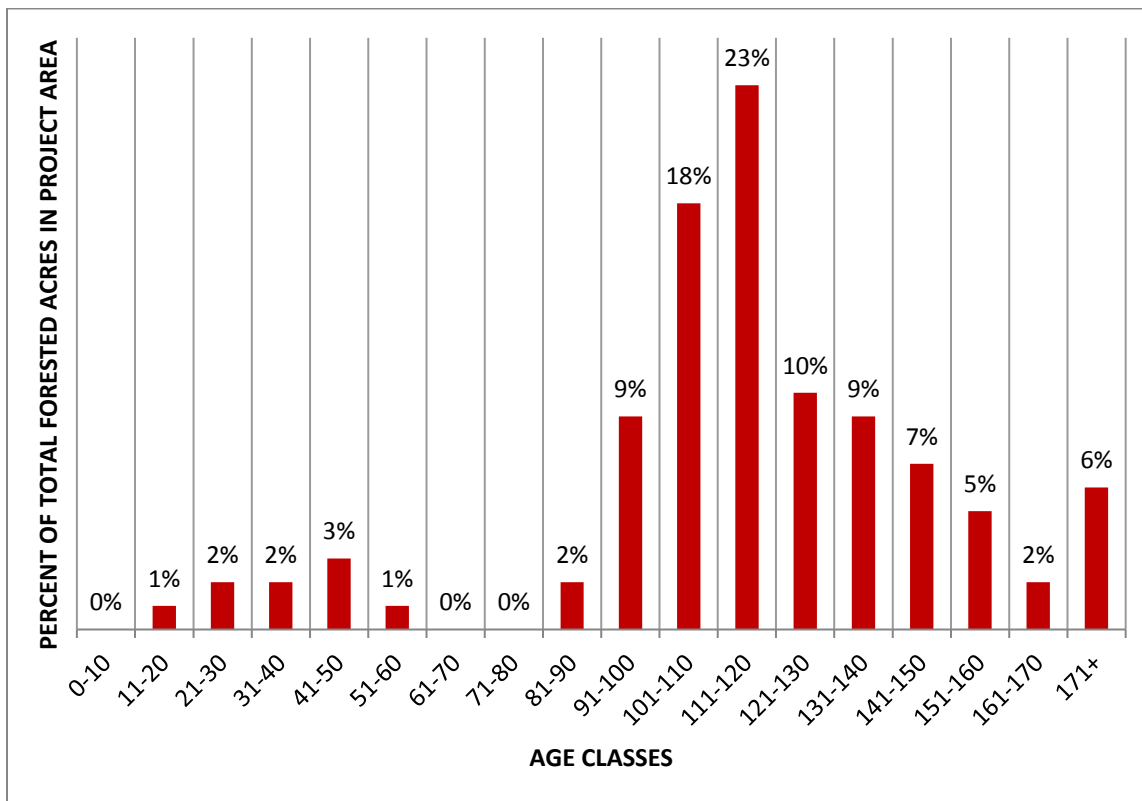
| <b>Ecological System Group</b> | <b>Approximate Acres (%)</b> |
|--------------------------------|------------------------------|
| Northern Hardwood Forests      | 489 (<1%)                    |
| Cove Forests                   | 5,383 (5%)                   |
| Oak Forests and Woodlands      | 79,749 (78%)                 |
| Pine Forests and Woodlands     | 15,707 (15%)                 |
| Total                          | 101,328                      |

Structural diversity involves both successional stage and canopy conditions. An appropriate balance of vertical structure within each community also provides habitat for associated terrestrial species that require either grass/forb-seedling/shrub (early seral), and/or trees (late seral) at some stage in their life cycle. Another important type of condition that combines elements of both early and mid – to late successional forest is open woodlands. Created and maintained largely by periodic fire disturbance regimes, open woodlands are characterized by an overstory of trees that are spaced far enough apart to allow sunlight to reach the forest floor. This structural condition allows the development of a grassy/shrubby/herbaceous/woody understory. Many species depend on the juxtaposition of both mature overstory and a well-developed grassy/shrubby/herbaceous understory for their life cycle needs.

At this stage of the analysis, the existing conditions discussion will include the overall age class distribution of forested lands, acres of existing vegetation, and closed canopy vs. open canopy forest stands. The latter is also known as a departure analysis.

Over the next six to nine months, site specific surveys will occur in and around stands which are identified for treatment. Data collected will be used to determine the extent of old growth, stand structure, species composition, age, forest health, growth rates, presence of invasive plants and site productivity.

Figures 1, 2 and 3 show the age class distributions across the NFS lands within the entire project area and within the two Rx's where most vegetation management activities are proposed. The age class distributions include the creation of early successional habitat approved in the Rocky Spur EA (2012) and the West Side EA (2014) although not all units have been harvested at this time. Lands within Rx 7G-Pastoral Landscapes and Rx 13-Mosaics of Habitat are approximately 65% of the project area and are suitable for timber harvest. It is important to note that not all of the acres within these two Rx's are available for timber harvesting due to steep slopes, lack of access, low site productivity or other factors. The remaining Rx's are either unsuitable for timber production or have limited opportunities.



**Figure 1. Age Class Distribution for the Entire Project Area**

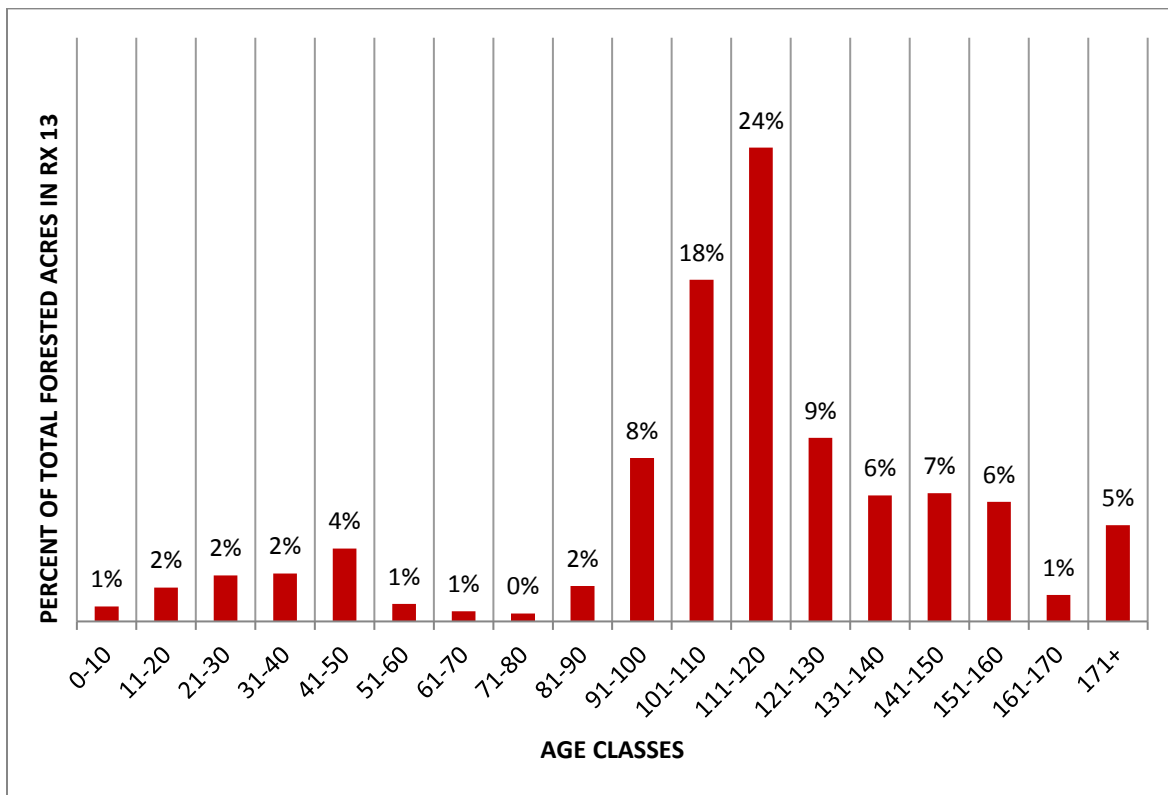


Figure 2. Age Class Distribution for Rx 13-Mosaics of Wildlife Habitat within the NSM Project Area

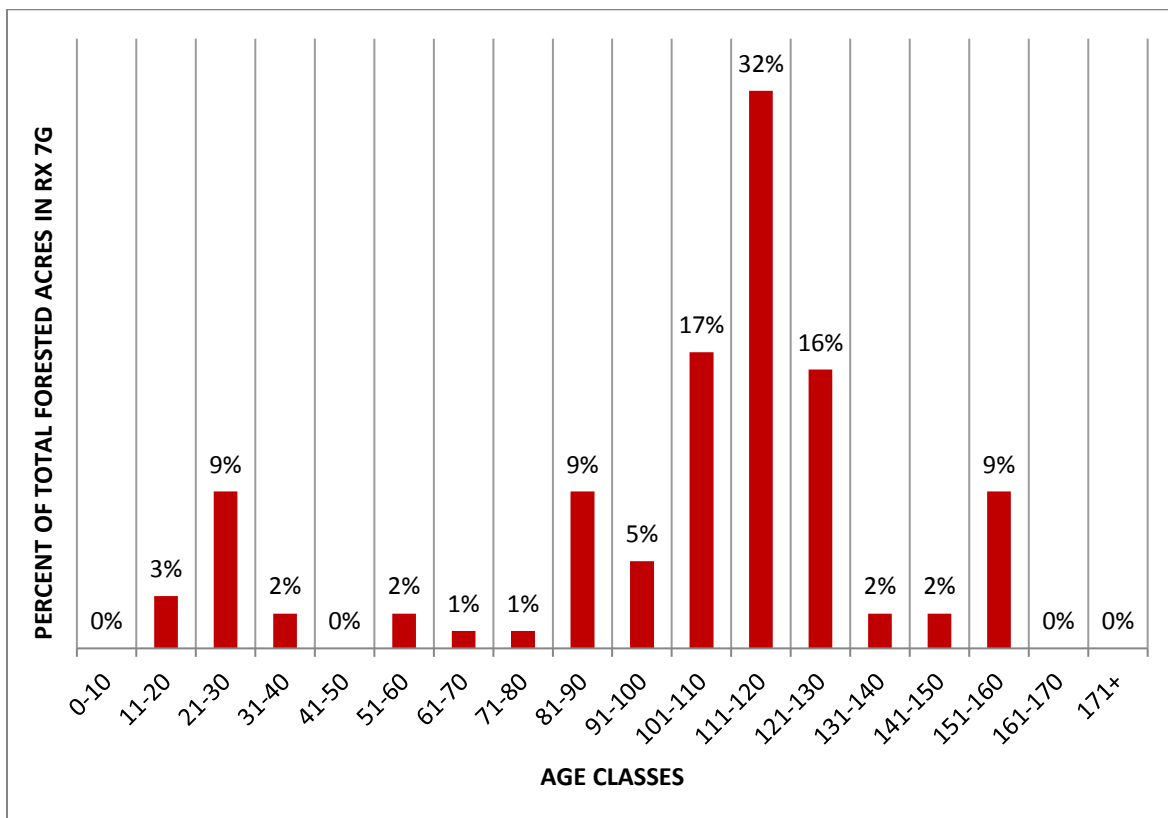


Figure 3. Age Class Distribution for Rx 7G-Pastoral Landscapes within the NSM Project Area

Preliminary data show a forest which predominately “older”, with approximately 76% of stands greater than 100 years old (Figure 2) in Rx 13. Only 17% of the project area is in an optimal mast producing condition. Oak stands are generally believed to be at optimal production for acorns between the ages 40 and 100 years. In Rx 13, 68% of forest stands are greater than 100 years old, and similarly only 18% are at optimal mast production.

In Rx 13, it is believed that a modest amount of timber harvesting occurred from the mid 1950s until the present averaging a little over 100 acres a year over the last 60 years or so. That represents less 2% of the Rx area harvested every 10 years. This time period also includes the Gypsy Moth outbreak of 1980s and 1990s where salvage harvesting was occurring in earnest in some areas of the district. Ninety to 140 years ago heavy industrial harvesting occurred where approximately 43,000 acres were harvested over a 50 year period between 1877 and 1927. That represents about two – thirds of the analysis area. This level of harvesting was very common in the Appalachian Mountains and in the Southeast to support manufacture of iron and to provide forest products to a developing nation. Harvesting appears to have peaked around the turn of the century. The oldest stand in Rx 13 is 299 years old.

A very similar harvesting trend occurred in Rx 7G (Figure 3) but at a smaller scale. There are no forest stands over the age of 158 years old in Rx 7G. This is likely due to the more accessible nature of these lower lying areas. There is also approximately 100 acres of grassland in the Rx area.

The dominant forest stand types in Rx 13 are “white oak-red oak-hickory” (25417 acres), “chestnut oak” (10536 acres) and “chestnut oak-scarlet oak-yellow pine” (6394 acres), together comprising 66% of the project area. Pine is the dominant species on approximately 14,924 acres or about 23% of the project area. Pine species include white pine, pitch pine, Table Mountain pine, Virginia pine, and shortleaf pine.

The dominant forest stand types in Rx 7G are “white oak-red oak-hickory” (754 acres) and “chestnut oak-scarlet oak-yellow pine” (279 acres), together comprising 65% of the project area. Virginia pine is the dominant species on approximately 253 acres or about 16% of the project area. The amount of Virginia pine likely indicates much of that area was previously cleared.

Shortleaf pine is very uncommon within the project area. The demise of shortleaf pine in the mountains is thought to be due largely to a changed fire regime and the fact that it was also a highly sought after timber tree in the southern region for lumber and other products. It is thought that Shortleaf was in many cases “high-graded” out of many mixed hardwood / pine stands. This type of harvesting did not allow enough space or light for the species to regenerate itself.

## **Desired Conditions for Ecological Systems**

The Forest Plan provides the following management strategies and desired conditions for the primary ecological systems in the project area. These desired conditions are derived from the BioPhysical Settings (BpS) developed in the LANDFIRE model that estimate the distribution of successional stage and canopy cover for each ecological system using pre-European settlement rates for disturbances and succession. For more information, please visit [www.landfire.gov](http://www.landfire.gov).

The Forest Plan management strategy for the Cove Forests is to utilize timber harvest to approach the early successional habitat objective since fire is not a common disturbance in this system except in the

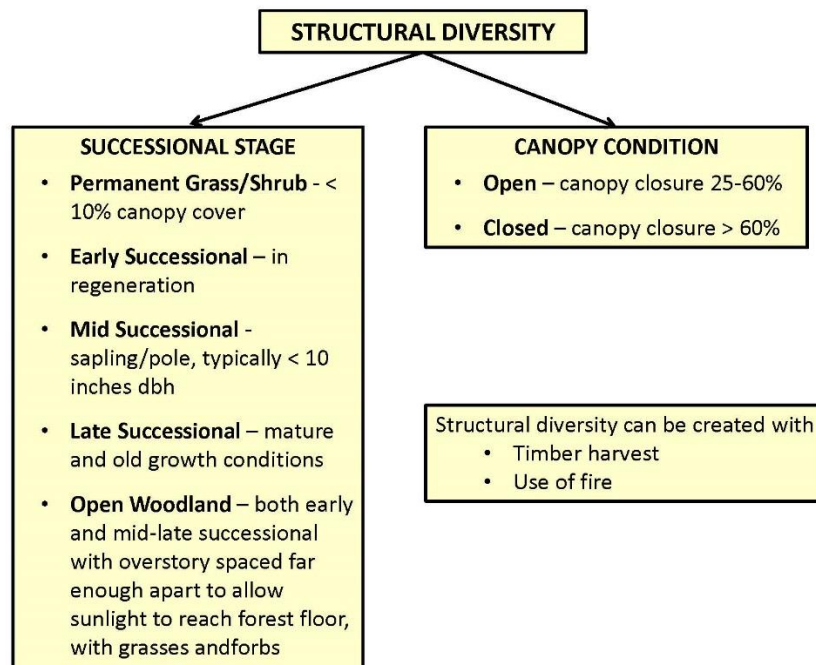


driest of conditions. The greatest stress and threat to this system are invasive plants due to the moist, rich soil conditions of these sites.

Forest strategies for maintaining and enhancing the Oak Forests and Woodlands systems will integrate the use of timber harvest and fire. These management tools can occur independently or together on the same acres. The greatest stresses and threats to the oak forest and woodlands system are the lack of open conditions needed to establish and maintain oak reproduction and the competition of faster growing species due to the exclusion of fire or infestations of non-native invasive species. We will rely heavily on utilizing fire to restore and maintain more open canopy conditions and grassland/shrublands. Timber harvest will be another frequent technique of creating regenerating forests and creating desired more open canopy conditions. Given its importance as a food source for many wildlife species, maintaining a high percentage of oak in ages that produce mast is also important. Planting American chestnut that is resistant to the Asian chestnut blight is an important restoration activity that would occur mostly in these systems.

The use of fire will be the prime strategy for maintaining and enhancing the Pine Forests and Woodlands systems. Timber harvest will also be used to a lesser extent for regeneration. Restoration of short-leaf pine by planting is a restoration strategy that would be focused on where it historically occurred on the landscape. The greatest stresses and threats to this system are lack of disturbance to create regeneration and open woodland structure, invasive species including the native pine bark beetle, and climate change that could reduce rainfall and make insect outbreaks more common.

The successional stage and canopy condition components of structural diversity are defined in the Forest Plan as:





**Figure 4. Example of Open Canopy Condition**

**DC ESD-07:** For Cove Forests, regenerating forests (0-10 years old) comprise around 4% of system acreage. Late successional forests (100 years old or older) comprise around 57% of system acreage. Fire is not a major disturbance in this system and typically occurs during the driest of conditions when fire may back and creep into these areas from upper slopes. Open canopy conditions are present on only about 9% of the area due to treefall gaps usually the result of downburst wind events and senescence or mortality of single trees. On the GWNF this type is interspersed with the oak dominated systems in concave landforms. Cove Forests often occupy land along riparian areas and adjacent to upland areas in concave landforms at upper ends of watersheds.

#### Desired Structural Conditions for Cove Forests

| Structure              | Early | Mid-Successional<br>Closed Canopy | Late Successional<br>Open Canopy | Late Successional<br>Closed Canopy |
|------------------------|-------|-----------------------------------|----------------------------------|------------------------------------|
| % of ecological system | 4     | 39                                | 9                                | 48                                 |
| Age                    | 0-10  | 11-99                             | 100+                             | 100+                               |

**DC ESD-08:** For Oak Forests and Woodlands, regenerating forests (0-15 years old) comprise around 12% of system acreage. Fire is a very important component of this system (with a return interval of about 5 to 15 years) and results in open canopy structure on about 65% of the area. In many of the woodland areas native grasses are common. The mid and late successional open canopy represents most of the system where frequent low intensity fire and other disturbances such as ice and wind maintains open canopy conditions. The late successional closed canopy condition occurs where fire is excluded due to topographic and moist fuel conditions resulting in more mesophytic species composition that then makes opportunities for fire even more uncommon.

#### Desired Structural Conditions for Oak Forest and Woodlands

| Structure              | Early | Mid-Successional Closed Canopy | Mid-Successional Open Canopy | Late Successional Open Canopy | Late Successional Closed Canopy |
|------------------------|-------|--------------------------------|------------------------------|-------------------------------|---------------------------------|
| % of ecological system | 12    | 7                              | 10                           | 57                            | 14                              |
| Age                    | 0-15  | 16-69                          | 16-69                        | 70+                           | 70+                             |

**DC ESD-09:** For Pine Forests and Woodlands, regenerating forests (0-15 years old) comprise about 13% of system acreage. Mid to late successional forests comprise approximately 87% of system acreage. Frequent fire occurring about every 3-9 years is a very important component of this system and results in open canopy structure on about 80% of the area.

#### Desired Structural Conditions for Pine Forests and Woodlands

| Structure              | Early | Mid-Successional Closed Canopy | Mid-Successional Open Canopy | Late Successional Open Canopy | Late Successional Closed Canopy |
|------------------------|-------|--------------------------------|------------------------------|-------------------------------|---------------------------------|
| % of ecological system | 13    | 3                              | 25                           | 54                            | 5                               |
| Age                    | 0-15  | 16-70                          | 16-70                        | 71+                           | 71+                             |

Lands within Rx 13 also have the following desired conditions for ecological system groups:

| Ecological System Group    | % of Area in 0-10 Age Class | % of Area in Mid - Late Open Canopy Condition |
|----------------------------|-----------------------------|---|
| Cove Forests               | 4-6                         | 6-12  |
| Northern Hardwood Forest   | 5-7                         | 8-12  |
| Oak Forests and Woodlands  | 9-11                        | 60-70   |
| Pine Forests and Woodlands | 9-11                        | 70-80   |

### Ecological Departure

“Ecological Departure” analysis is a term developed by The Nature Conservancy to contrast current forest structure with the historical natural range of variability (NRV) for the ecological systems. The Forest Plan desired conditions described above are the equivalents of the NRVs for those systems. The following tables compare the key components of the desired conditions for the ecological system groups with the existing conditions on NFS lands in the project area. These estimates were developed by The Nature

Conservancy (Jean Lorber). The estimates include the regeneration and thinning treatments associated with the Rocky Spur and West Side EAs that were previously approved.

**Table 3. Ecological Departure for all Forested NFS lands within the NSM Project Area.**

| <b>Pine Forests and Woodlands</b> | <b>Early Successional</b> | <b>Mid Successional Closed Canopy</b> | <b>Mid Successional Open Canopy</b> | <b>Late Successional Closed Canopy</b> | <b>Late Successional Open Canopy</b> | <b>Total</b> |
|-----------------------------------|---------------------------|---------------------------------------|-------------------------------------|--|--------------------------------------|--------------|
| Desired Condition (NRV)           | 13%                       | 3%                                    | 25%                                 | 5%                                     | 54%                                  | 100%         |
| Current Condition                 | 1%                        | 7%                                    | 0%                                  | 90%                                    | 1%                                   | 100%         |
| <b>Ecological Departure</b>       | <b>1%</b>                 | <b>3%</b>                             | <b>0%</b>                           | <b>5%</b>                              | <b>1%</b>                            | <b>90%</b>   |

| <b>Oak Forests and Woodlands</b> | <b>Early Successional</b> | <b>Mid Successional Closed Canopy</b> | <b>Mid Successional Open Canopy</b> | <b>Late Successional Closed Canopy</b> | <b>Late Successional Open Canopy</b> | <b>Total</b> |
|----------------------------------|---------------------------|---------------------------------------|-------------------------------------|--|--------------------------------------|--------------|
| Desired Condition (NRV)          | 12%                       | 7%                                    | 10%                                 | 14%                                    | 57%                                  | 100%         |
| Current Condition                | 2%                        | 6%                                    | 0%                                  | 90%                                    | 1%                                   | 100%         |
| <b>Ecological Departure</b>      | <b>1%</b>                 | <b>6%</b>                             | <b>0%</b>                           | <b>14%</b>                             | <b>1%</b>                            | <b>77%</b>   |

| <b>Cove Forests</b>         | <b>Early Successional</b> | <b>Mid Successional Closed Canopy</b> | <b>Mid Successional Open Canopy</b> | <b>Late Successional Closed Canopy</b> | <b>Late Successional Open Canopy</b> | <b>Total</b> |
|-----------------------------|---------------------------|---------------------------------------|-------------------------------------|--|--------------------------------------|--------------|
| Desired Condition (NRV)     | 4%                        | 39%                                   | 0%                                  | 48%                                    | 9%                                   | 100%         |
| Current Condition           | 1%                        | 23%                                   | 0%                                  | 75%                                    | 0%                                   | 100%         |
| <b>Ecological Departure</b> | <b>1%</b>                 | <b>23%</b>                            | <b>0%</b>                           | <b>48%</b>                             | <b>0%</b>                            | <b>27%</b>   |

**Table 4. Ecological Departure for NFS lands within Rx 13 in the NSM Project Area.**

| <b>Pine Forests and Woodlands</b> | <b>Early Successional</b> | <b>Mid Successional Closed Canopy</b> | <b>Mid Successional Open Canopy</b> | <b>Late Successional Closed Canopy</b> | <b>Late Successional Open Canopy</b> | <b>Total</b> |
|-----------------------------------|---------------------------|---------------------------------------|-------------------------------------|--|--------------------------------------|--------------|
| Desired Condition (NRV)           | 13%                       | 3%                                    | 25%                                 | 5%                                     | 54%                                  | 100%         |
| Current Condition                 | 3%                        | 10%                                   | 0%                                  | 86%                                    | 1%                                   | 100%         |
| <b>Ecological Departure</b>       | <b>2%</b>                 | <b>3%</b>                             | <b>0%</b>                           | <b>5%</b>                              | <b>1%</b>                            | <b>89%</b>   |

| <b>Oak Forests and Woodlands</b> | <b>Early Successional</b> | <b>Mid Successional Closed Canopy</b> | <b>Mid Successional Open Canopy</b> | <b>Late Successional Closed Canopy</b> | <b>Late Successional Open Canopy</b> | <b>Total</b> |
|----------------------------------|---------------------------|---------------------------------------|-------------------------------------|--|--------------------------------------|--------------|
| Desired Condition (NRV)          | 12%                       | 7%                                    | 10%                                 | 14%                                    | 57%                                  | 100%         |
| Current Condition                | 2%                        | 8%                                    | 0%                                  | 89%                                    | 0%                                   | 100%         |
| <b>Ecological Departure</b>      | <b>2%</b>                 | <b>7%</b>                             | <b>0%</b>                           | <b>14%</b>                             | <b>0%</b>                            | <b>77%</b>   |

| <b>Cove Forests</b>         | <b>Early Successional</b> | <b>Mid Successional Closed Canopy</b> | <b>Mid Successional Open Canopy</b> | <b>Late Successional Closed Canopy</b> | <b>Late Successional Open Canopy</b> | <b>Total</b> |
|-----------------------------|---------------------------|---------------------------------------|-------------------------------------|--|--------------------------------------|--------------|
| Desired Condition (NRV)     | 4%                        | 39%                                   | 0%                                  | 48%                                    | 9%                                   | 100%         |
| Current Condition           | 1%                        | 27%                                   | 0%                                  | 72%                                    | 0%                                   | 100%         |
| <b>Ecological Departure</b> | <b>1%</b>                 | <b>27%</b>                            | <b>0%</b>                           | <b>48%</b>                             | <b>0%</b>                            | <b>24%</b>   |

The ecological departure analysis shows that the Cove Forests are in relatively good development compared to the desired conditions, with the exception that canopies within late successional stands could be opened up more. However, both the Oak Forests and Woodlands and the Pine Forests and Woodlands ecological systems are significantly departed from their desired conditions within Rx 13-Mosaics of Habitat and across the entire project area.

As described in the proposed action section, the use of silvicultural methods and prescribed fire are the primary activities proposed to move the conditions in Rx 7G and Rx 13 areas closer to the desired conditions in the Forest Plan.

## **Existing Conditions for Species Diversity and Habitats**

### **Habitats**

The NSM project area consists of a forest matrix of old forest with about 89% of all timber stands being over 90 years old. Only 1% of the project area is young or in early age classes (0-20 years). This acreage does not include the 230 acres of permanent grassy wildlife clearings, linear strips and old field habitats that provide foraging areas for young turkey, songbirds, deer, and small mammals. Current condition, described in terms of ecological system diversity, is discussed in the Vegetation Section. The most common tree species found in the overstory include red oak, chestnut oak, white oak, scarlet oak, black oak, yellow poplar, black locust, red maple, black cherry, mockernut hickory, with scattered eastern white, short-leaf, Virginia, and pitch pines. Examples of common species found in the midstory include: serviceberry, black gum, sassafras, eastern white pine, grape, witch hazel, white oak, chestnut oak, red maple, scarlet oak, mockernut hickory, yellow poplar, black locust, post oak, mountain laurel, big-toothed aspen, tree of heaven (ailanthus), Japanese barberry, deerberry, and dogwood. Examples of common groundcover species include: bracken fern, corymbed spirea, deerberry, dwarf iris, sassafras, Canada cinquefoil, ditany, Virginia creeper, spotted wintergreen, Christmas fern, hog peanut, grasses, huckleberry, false foxglove, panic grass, maple-leaved viburnum, dogwood, common blue violet, witch hazel, trailing arbutus, sericea lespedeza, mealy bellwort, yellow stargrass, striped maple, hornbeam, downy rattlesnake plantain, botrychium, whorled loosestrife, dewberry, minibush, serviceberry, poison ivy, ox-eyed daisy, cancerroot, corylberry, blueberry, greenbrier, Indian cucumber root, hay-scented fern, wild yam, Japanese stilt grass and teaberry. The mixture of vegetation is typical of acidic soils developed over sandstone and shale bedrock in the Ridge and Valley portion of the Appalachian Mountains and typical nonnative invasive plant (NNIP) species that have invaded these natural systems.

Old agricultural fields (72 acres) still existing on NFS lands within the project area have been maintained over the years to provide important permanent open, herbaceous habitat for wildlife. They are largely influenced by past cultural activities and may be dense sod (fescue) or a field of annual and perennial herbs, grasses, woody shrubs and tree seedlings. Old fields provide food and cover for a variety of wildlife species. In most cases within the NSM project area the shrubs planted in the past were non-native invasive plant (NNIP) species, such as autumn olive or bicolor lespedeza. To provide some additional early successional open habitat, permanent wildlife openings (or wildlife clearings) were established within the past 25 years across the project area through previous timber sales which provide grassland/forb habitat for wildlife cover and forage. Permanent openings are used by a variety of wildlife, both game and non-game species. Most of these previously established grassy clearings are between 0.25-1.5 acres in size and occur as “islands” within the forested landscape, usually through the conversion of old timber landings. About 140 acres of small wildlife openings within the project area are currently mowed semi-annually to keep them in an open, early successional vegetation stage, along with 20 acres of linear strips accessing these clearings. The majority of these wildlife openings have been invaded by nondesirable or NNIP species over time, and need to be restored to native grasses and forbs that provide high quality nutrition and cover for many wildlife species.

### **Wood Turtle Habitat**

The wood turtle is a Region 8 Sensitive Species on the George Washington and Jefferson National Forests. The wood turtle is associated with aquatic, riparian, and adjacent upland habitats. Since they spend warmer months foraging and nesting in upland areas, they are sometimes considered a forest species, however they use a wide variety of habitats including swamps, bogs, wet meadows, upland fields

and pastures. They over-winter in aquatic habitat using clear rivers, streams, and creeks with hard sand or gravel bottoms and a moderate current. Wood turtles have been found in the Slate Lick area...

## Trout Streams

More than 676.2 miles of potential aquatic stream habitat on NFS and private lands are contained in the project area, including 78 named creeks. The Virginia Department of Game and Inland Fish uses a method of classifying trout streams based on aesthetics, productivity, resident fish population and stream structure. Classes I through IV rate wild trout habitat; Classes V through VII rate cold water habitat not suitable for wild trout but adequate for year-round hold-over of stocked trout. The stream miles in each Class are summarized in Table 5.

**Table 5 . Summary of NSM Project Area Coldwater Stream Habitat by VDGIF and WVDNR Classification**

| <b>CLASS</b>                      | <b>Project-wide<br/>(miles)</b> | <b>NFS<br/>(miles)</b> |
|-----------------------------------|---------------------------------|------------------------|
| II                                | 15.20                           | 13.37                  |
| III                               | 13.82                           | 10.79                  |
| IV                                | 94.46                           | 48.27                  |
| V-VIII                            | 2.19                            | 1.85                   |
| WV wild brook trout stream        | 9.06                            | 5.64                   |
| <b>Total Cold Water Fisheries</b> | <b>134.73</b>                   | <b>79.92</b>           |

Slate Lick Branch is a native trout stream above Slate Lick Reservoir and provides habitat for wood turtles. There are several dispersed camping sites, and an unauthorized privy, adjacent to Slate Lick Branch at the Slate Lick Dispersed Recreation area.

## Desired Conditions for Species Diversity and Habitats

### Habitats

According to the Forest Plan, open areas (including permanent and semi-permanent grasslands, shrublands, wildlife clearings, and old fields) are to occupy ideally around 4% of the project area. Currently, permanent open areas including old field habitat, wildlife openings and linear strips make up 230 acres or 0.2% of the NSM project area. Permanent open grass/forb and shrub habitats are important elements of early successional habitat. Maintained grassy openings such as old fields, wildlife clearings and linear strips provide nutritious green forage in the winter and early spring and seeds during late summer and fall. Because of the abundance of insects and herbaceous plants produced in these open habitats, they are especially important as brood rearing habitat for young turkeys (Nenno and Lindzey 1979, Healy and Nenno 1983). A number of disturbance-dependent birds, such as northern bobwhite, grasshopper sparrow, golden-winged warbler, and blue winged warbler, are associated with old field habitat (Hunter et al. 2001). Abandoned fields are important for rabbits, deer, turkey, and many small mammals. Woodcock use old fields as courtship, feeding, and roosting sites (Straw et al. 1994; Kremetz and Jackson 1999). The benefits of permanent openings to white-tailed deer are well documented as well. Permanent openings, especially those containing grass-clover mixtures, are used most intensively in early spring, but also are an important source of nutritious forage in winter, especially when acorns are in short supply (Wentworth et al. 1990; Kammermeyer et al. 1993).



The Forest Plan directs that permanent wildlife openings are typically maintained for wildlife habitat on an annual or semi-annual basis with the use of cultivation (disking), mowing, mulching, or other vegetation management treatments such as spraying or burning. These openings may contain native grasses and forbs or may be planted to naturalized non-invasive agricultural species such as clover, rye grass, wheat, or small grains. Old fields are maintained on a less frequent basis (5-10 year intervals), usually with burning and mowing. Although managed less intensively than other types of permanent openings, some degree of periodic management is necessary to maintain these old field habitats.

Complexes of woodlands, savannahs, and grasslands were once a frequent occurrence across the southeastern landscape, maintained with frequent fire on xeric ridge-tops and south-facing slopes (DeSelm and Murdock 1993; Davis et al. 2002). Woodlands are open stands of trees, generally forming 25 to 60 percent canopy closure (Grossman et al. 1998:21) and may be of pine, hardwood (typically oak), or mixed composition. Savannahs are usually defined as having lower tree densities than woodlands; grasslands are mostly devoid of trees. All of these conditions typically occurred in mixed mosaics within a fire maintained landscape. In all cases, a well-developed grassy or herbaceous understory is present. Because existing woodland, savannah, and grassland complexes are rare, do not conform to existing definitions of community types, and are not consistently tracked, the current acreage of these two habitat types is not well documented. Woodlands and savannahs are expected to occupy the driest sites of the dry and xeric oak forest, woodland, and savannah and the xeric pine and pine-oak forest and woodland community types. These community types are most likely to occupy sites that historically supported woodlands and savannas when fire was frequently on the landscape (Forest Plan).

### **Wood Turtle**

The Forest Plan contains direction to manage watersheds with known populations of wood turtles to maintain or enhance the terrestrial summer foraging habitat, nesting habitat and overwintering habitat of wood turtles, and to minimize human interactions, such as motorized vehicle use and recreation.

### **Trout**

The Forest Plan lists wild brook trout as a Management Indicator Species because it can be an indicator of stream acidification and is susceptible to changes in stream temperatures. The Plan contains direction to protect and restore riparian forests to moderate changes in stream temperature, maintain stream bank stability, and provide instream habitat, particularly in key native brook trout streams.

## **Existing and Desired Conditions for Watersheds**

Priority watersheds are identified in the Forest Plan as those watersheds with sensitive aquatic resources, currently identified water quality concerns due to private land or natural causes (impaired streams), and/or public water supplies. These watersheds are a priority for inventorying soil and water improvement needs, restoring streams and streamside systems to fully functioning systems, restoring habitat for sensitive aquatic and riparian species, addressing opportunities to reduce impacts from roads through relocation or decommissioning, and evaluating any new proposals for special uses that could affect water quality (Plan, p. 2-2). The project area includes the following five priority watersheds: Capon Run-North Fork Shenandoah River, Little Dry River, Skidmore Fork-Dry River, Black Run-Dry River, and Hawes Run-South Fork South Branch Potomac River (Appendix A, Map 8). Dry River-Riven Rock and the North River water systems provide drinking water for the City of Harrisonburg, Virginia (Plan, p. 2-3.) The Virginia Department of Environmental Quality has identified Dry River 11.7 miles upstream of its



confluence with North River as a public water supply for Harrisonburg. See Appendix A, Map 8 for locations of priority watersheds and impaired streams.

**Table 6. Key Characteristics of Priority Watersheds in the Project Area**

| <b>Watershed Name</b>                           | <b>Total Acres</b> | <b>% National Forest</b> | <b>T&amp;E, Sensitive, Locally Rare Species</b> | <b>Municipal</b> | <b>Brook Trout</b> | <b>303d Biologic at Risk</b> | <b>303d Acid Deposition</b> | <b>303d Recreation</b> | <b>Exceptional Waters</b> | <b>Watershed Condition Class</b> |
|---|--------------------|--------------------------|---|------------------|--------------------|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------------|
| Black Run-Dry River                             | 21,837             | 93%                      | 1   | x                | x                  |                              | x                           |                        |                           | 2                                |
| Capon Run-North Fork Shenandoah River           | 31,060             | 54%                      | 1   |                  | x                  | x                            |                             |                        | x                         | 2                                |
| Skidmore Fork-Dry River                         | 24,884             | 85%                      |   | x                | x                  | x                            | x                           |                        |                           | 2                                |
| Little Dry River                                | 20,128             | 78%                      |   |                  | x                  |                              | x                           | x                      |                           | 2                                |
| Hawes Run-South Fork South Branch Potomac River | 21,094             | 47%                      | 1   |                  |                    | x                            |                             |                        | x                         | 2                                |

- “Brook Trout” refers to watersheds with intact brook trout populations, based on the Eastern Brook Trout Joint Venture analysis.
- “303d” refers to water quality impairments on NFS lands, as determined by the state, in accordance with Section 303d of the Clean Water Act. Exceptional waters, as designated by the states, in accordance with the Antidegradation Policy of the Clean Water Act.
- Watershed Condition Class: In the Forest Service’s Watershed Condition Framework process, all watersheds with at least 5% Forest Service ownership were assessed and placed in one of three Condition Classes: Class 1 – Functioning Properly; Class 2 – Functioning at Risk; and Class 3 – Impaired Function. All watersheds on the George Washington National Forest are in Class 1 or Class 2.

## Existing and Desired Conditions for Roads

There are a number of Forest Service system roads in the project area that are located next to streams or cross streams numerous times and cause sedimentation problems. The Forest Plan has direction that such roads within priority watersheds that have sensitive aquatic species (such as trout), currently identified water quality concerns, and/or public water supplies would be a priority for decommissioning. In 2015, the Forest went through an extensive Travel Analysis Process (TAP) to evaluate Forest Service system roads to identify benefits, problems and risks to ecological and economic resources, and management opportunities. The TAP report identified 160 miles of system roads for potential decommissioning and the Forest Plan has direction to decommission 100-200 miles of system roads and unauthorized roads over the next ten years. Priorities for decommissioning are roads causing resource damage and roads in priority watersheds.

## Proposed Actions

All of the following proposed actions are within NFS lands. These proposed actions would occur over the next ten years. More detailed descriptions for activities are provided after the list. For ease of discussion and mapping, the project area has been broken out into five geographic working areas. Detailed maps of the proposed actions are provided by working area (Appendix A, Maps 2-6). An additional detailed map of the West Side area is included to show the proposed prescribed burns (Appendix A, Map 7).

The five Working Areas include:

1. Slate Lick/Cross Mountain
2. Mitchell Knob/Camp Run
3. Feltz Ridge/Leading Ridge
4. German River
5. Blue Hole/Grove Hollow

## Vegetation Management

Approximately 6,100 acres of mechanical and non-commercial forest stand improvement treatments are proposed in the project area. These treatments will overlap with areas that have been identified for the open, woodland, and savannah habitat improvement projects described below. Appendix B includes a description of some of these treatments.

### Mechanical Treatments

The mechanical treatments would include variable thinning, conventional thinning, regeneration using coppice with reserves, patch regeneration openings, uneven-aged management, and establishment of shortleaf pine communities. These treatments will cover approximately 4,748 acres, and will overlap with the proposed new prescribed burn blocks on approximately 1,400 acres. Logging systems may include cable logging systems on steeper slopes.

1. Approximately 3,281 acres would be thinned to various stocking levels based on site-specific objectives described below.
  - a. Variable Thinning – Thinning to various stocking levels to create a mosaic of habitat conditions across treatment units. Some examples are “open” woodland conditions, savanna, and areas thinned to improve stand vigor and growth. Within areas proposed for thinning, nine patch openings would be created (total 60 acres), ranging in size from five to nine acres.
  - b. White Pine – thin approximately 58 acres in four white pine dominated stands within the Mitchell Knob Working Area. Approximately half of the trees will be removed to improve stand vigor.
  - c. Grassy Area Enhancement - promote open canopy conditions at nine locations, for a total of 210 acres, to enhance the existing herbaceous understory.
  - d. Pine Ecosystem Restoration - establish viable communities of shortleaf pine on 158 acres across 23 locations.

- e. Uneven-aged Management - harvest 31 acres within a northern hardwood-dominant stand to establish uneven-aged management. This would occur in the German River Working Area.
2. Approximately 1,470 acres would be regenerated to create early successional habitat (ESH) using the coppice with reserves treatment.
  - a. Regeneration objectives are site-specific; however, in most cases the goal would be to return stands to an oak dominated condition. Harvesting will retain approximately 10 to 40 trees per acre, maintaining a viable second age class.
  - b. Of the areas to be regenerated, approximately 374 acres would need pre-harvest injections (PHI) or competition control prior to and following harvest to promote regeneration of oak species and other species important to wildlife. These areas are not shown on the maps.
  - c. Viable communities of shortleaf pine would be established on 11 acres across 2 locations within the regeneration areas.
  - d. Some of the polygons displayed on the map are larger than 40 acres, which is the limit for a regeneration harvest. The final polygon will be 40 acres or less and will be located within the approximate “footprint” of the polygon.

## **Forest Stand Improvement**

Approximately 1,404 acres of Forest Stand Improvement (FSI) would be performed as part of the project. This will entail mechanical and chemical treatments in approximately 50 immature stands to encourage the establishment of oak species and other species important to wildlife.

## **Open Habitat Creation and Rehabilitation**

- Construct up to 75 acres of new permanent wildlife openings.
 

New openings will range in size from 1.5 to 15 acres, and stumps will be removed for continued maintenance and planting. Openings are to be disked, limed, fertilized, and seeded with a non-invasive wildlife mix including native warm season grasses, native forbs and legumes, as well as some annual, non-invasive small grains and legumes. Native hard or soft mast tree/shrub species will be planted in some areas to provide diverse structure, cover, and additional food sources.
- Rehabilitate up to 230 acres of existing permanent wildlife openings or old fields to provide early seral grassland/forb habitat.

The majority of the permanently open and maintained wildlife openings within the NSM project area currently contain cool-season grasses and non-native invasive species such as tall fescue, Japanese stilt grass, and sericea lespedeza, which are not providing quality wildlife cover and forage. These openings would need to be treated with appropriate herbicides, disked or burned, and seeded with a more diverse wildlife habitat mix. Soft mast species may also be

planted in some openings to provide energy rich fruit as well as to add additional structure to improve nesting, fawning, and escape cover.

## **Woodland and Savannah Habitat Creation**

- Create approximately 195 acres total of open woodland or savannah habitats in the Camp Run and Cross Mountain areas.

In Camp Run, this will require mechanically thinning 12 acres of young pines and some hardwoods that have grown up in an old field site, which will be maintained as open, grassy pine-oak savannah habitat in the future via mechanical means or through prescribed burning. Native warm season grasses, legumes and wildflowers will also be planted at Camp Run savannah to improve wildlife cover, foraging and pollinator habitats. At Cross Mountain, restoration of an oak woodland is proposed through timber thinning. A portion of the woodland (10-15 acres) will be cleared of stumps to allow for planting and mowing in future. This area will be planted with a native mix of grasses, legumes, and wildflowers to improve wildlife cover, foraging and pollinator habitats. The woodland will be maintained by prescribed fire, or mechanical means when fire is not feasible, to keep the understory in an open herbaceous condition, free of woody saplings.

## **Prescribed Burning**

### **New Prescribed Burn Blocks**

A total of 5,759 acres of the project area would be burned in five new blocks, ranging from 436 to 1,608 acres. About 1,418 of mechanical treatments are included in these blocks, including 1,255 acres of thinning treatments. Specific Rx burn treatment parameters are based on the objectives in individual stands and will include seasonality, fire return intervals and intensity. In general, periodic fire would be variable and occur at a return interval of 4 to 12 years. Most of the burn units will use existing roads, trails, and burn boundaries as burn boundaries. In addition, there is a need to construct approximately 3.25 miles of dozer line.

## **Aquatic Organism Passage (AOP)/Watershed Improvements**

Assessment of culverts in the project area is still being conducted to determine priorities for AOP connectivity improvements. It is anticipated that up to fifteen (15) impassible culverts could need replacing with aquatic organism passable structures. These will be identified in each project activity area by Forest Fish Biologist and prioritized for replacement based on availability of funding.

Reduce impacts to wood turtles along Slate Lick Run from recreation use adjacent to the stream. Create a buffer along the stream where heavy camping and horse use are currently impacting the stream. Slate Lick Run is a vital habitat component for this Forest Service sensitive species in the Slate Lick area.

Construct up to ten waterholes for wildlife use and amphibian habitat. Water holes will be < 0.5 acres in size and provide year-round or ephemeral water sources for drinking as well as important wetland areas for amphibian breeding.

## **Hemlock Woolly Adelgid**

Treat approximately 34 acres of a healthy intact hemlock populations in the Gate Run area with the insecticide Imidacloprid for suppression of the hemlock woolly adelgid (*Adelges tsugae*). An additional 37 acres not examined in detail may contain intact hemlock populations that would be recommended for treatment as well.

## **Transportation**

### **System Road Construction and Reconstruction**

Approximately four segments (total of 3.4 miles) of new system road would be required to implement the proposed vegetation management activities. The amount of system road reconstruction has not been fully evaluated at this time.

### **System Road Decommissioning**

All roads listed below have been determined as potential candidates for decommissioning through TAP and subsequent roads analysis conducted by the Forest Service. Looking at a combination of resource damage, the minimal impact on access to the forest, current usage and future usage needs made these viable for decommissioning. See Appendix C for a description of decommissioning options.

151Q- Stony Fork Spur (0.75 miles). This is identified in TAP as a potential road for decommissioning. Currently in closed status with a total length of 0.75 miles. It is accessed via Stoney Run which is an ADMIN Use road and there are no culverts to remove.

235A-Root Run (1.59 miles). Currently in closed status with a total length of 1.59 miles. This road runs along and inside the riparian areas of Root Run and Marshall Run, both native trout streams, and has sedimentation problems. Some of this road is located within the Beech Lick Knob Recommended Wilderness Study Area.

Segment of 240C-Bible Run (0.1 miles). Currently in closed status with a total length of 4.0 miles. Much of this road crosses private land. There is a .099 mile segment on FS between private land and RT 240 (VEPCO road) that is proposed for decommissioning. There are no culverts to remove.

304-Dry Run Reservoir (3.2 miles). The first 0.3 miles of the 3.5 mile long road is listed as open status, but is on City of Harrisonburg property, and the fords are washed out. The 3.2 mile segment on FS is listed as seasonal use, but is inaccessible and is effectively already closed. There are no culverts to remove.

423B-Turner Run (1.0 miles). This road is currently in open status. It is a dead-end road with recent extensive rutting, mud-bogging and trash dumping occurring; all within the riparian area. There has been expansion of the road to 3 separate tracks. The road and ruts are parallel to and within 5 feet of the streambank. At a minimum, repair needs to be made and access controlled.

547-Kephart Run (2.4 miles). The first 1.81 miles is listed as open status and the remaining 0.59 miles is administrative use with a total length of 2.4 miles. Kephart Run Road runs adjacent to and fords Kephart

Run, a wild trout stream, numerous times; it showed signs of heavy and recent use with rutting, mud holes and expansion into the adjacent forest. It is a dead-end road along a native trout stream that is not needed for Forest management. For those reasons, it is proposed for decommissioning.

548-Hopkins Run (0.7 miles). The section of the road that connects with Route 33 is on City of Harrisonburg property (about .4 miles). The 0.3 Forest Service segment beyond this is listed as administrative use but is inaccessible and is effectively already closed. There is a perched culvert where the road crosses Peach Run on Harrisonburg property. Peach Run is a native trout stream. There are no other culverts to remove. The entire length of road is proposed for decommissioning.

549- Old 33 Raccoon Run (2.01 miles). This road is listed as open status with a total length of 2.01 miles. It parallels Route 33, has drainage issues, and is extremely rutted with large mud holes. It crosses Raccoon Run, a wild trout stream, with a difficult ford; it is not needed for Forest management. Drainage and maintenance will be necessary prior to closure to reduce potential sedimentation issues. There are no culverts to remove.

549A-Old 33 Shackelford (0.87 miles). This road is listed as open status with a total length of 0.87 miles. It is accessed via Old 33 Raccoon Run Road. It had some recent traffic, but not extensive. It is a dead-end road along a native trout stream that is not needed for Forest management. There are no culverts to remove. If FS 549 is decommissioned, this road becomes decommissioned by default.

## **Decision to be Made**

The North River District Ranger is the responsible official for this project and will decide whether to implement project activities as described in the proposed action, provide alternatives to the proposed action, or to continue with current management. The responsible official will also determine if there may be significant impacts that would require the preparation of an environmental impact statement.

## **Scoping Input Needed**

Written comments concerning this proposal will be accepted during a 30-day scoping period ending on October 18, 2017. Please send all comments either electronically to:

[comments-southern-georgewashington-jefferson-northriver@fs.fed.us](mailto:comments-southern-georgewashington-jefferson-northriver@fs.fed.us)

or through the mail to:

USDA Forest Service  
ATTN: Karen Overcash, Project Leader  
5162 Valleypointe Parkway  
Roanoke, VA 24019

When sending electronic comments, please note the name of the project in the subject line of the electronic mailing [i.e. North Shenandoah Mtn. Project].

Please share any specific concerns and/or alternatives that you feel need to be considered within the context of this proposed action. Make your comments as concise as you can and address the proposed action specifically.

This project implements the George Washington Forest Plan and is not authorized under the Healthy Forests Restoration Act (HFRA). The project is subject to the objections process at 36 CFR 218, subparts A and B (<http://www.ecfr.gov>). Only specific written comments received during this or any other designated opportunity for public comment provide standing for objections. Also to meet standing for objection, comments must meet the requirements of 36 CFR 218.8. For more information on the objection process and requirements, you may contact Jessie Howard at 540.265.5130, or by email at [jchoward@fs.fed.us](mailto:jchoward@fs.fed.us).

Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record of this analysis and will be included in the final project record. Pursuant to 7 CFR 1.27 (d), any person may request the agency to withhold a submission from the public record by showing how the Freedom of Information Act (FOIA) permits such confidentiality. Comments submitted anonymously will be accepted and considered.

If you do not have comments at this time, but would like to be informed of this analysis as it progresses, please let us know. If you do not respond to this request you will be removed from future mailings regarding this project unless you have previously asked to be kept on the mailing list.

If you have any questions concerning this project or would like to know more information about it, please contact Karen Overcash, Project Lead, at 540.265.5175.

Sincerely,

*/s/ Mary Yonce*

MARY YONCE  
District Ranger